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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/995,492	11/26/2001	Hong M. Dang	100111622-2	3187

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EXAMINER	
KRAMER, JAMES A	

ART UNIT	PAPER NUMBER
3627	

DATE MAILED: 04/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/995,492	DANG ET AL.	
	Examiner	Art Unit	
	James A. Kramer	3627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 February 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,6,7,9 and 11-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1-4,6,7,9 and 11-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/15/04 has been entered.

Drawings

The drawings are replete with errors and require correction. Examiner provides the following list of examples and notes that the provided list is not intended to be an exhaustive list of all errors, but rather serves as an example of the types of errors found. Examiner respectfully recommends that Applicant review all drawings prior to submission of any changes in order to reduce prolonged prosecution.

The drawings are objected to as failing to comply with 37 CFR 1.84(m) because the use of shading in the drawings reduces legibility. For Example, in the case of Figures 1, 2, 3, 4, 5, 6, 8, 9 and 12 the shading renders the drawings illegible.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because the same part of the invention is designated with multiple reference characters.

For example;

1. reference characters "1", "2" and "100" in Fig 1 have all been used to designate the multilevel infrastructure;

2. reference characters "160" and "260" in Fig 1 have both been used to designate back up and recovery module;

3. reference characters "140" and "240" in Fig 1 have both been used to designate alert manager;

4. reference characters "60" and "61" in Fig 8 have both been used to designate the HP Apache Web Server.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because the same reference characters designate different parts.

For example,

1. reference character "60" has been used to designate the tax server in Fig 1, the Pilot server in Fig 2, the web server in Fig 3, and first service provider server in Fig 4.

2. reference character "50" has been used to designate the business client in Figs 1, 2 & 3, the subscriber server in Fig 1A, the Apache Web Server in Fig 4, and the merchant web site in Figs 8 & 9

3. reference character "40" has been used to designated a cloud and a managed firewall device, both in Fig 6.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because reference characters mentioned in the description do not appear in the drawings.

For example, the following reference sign(s) mentioned in the description are not found in the drawings: Page 20, lines 3-5 of the Specification states, "In one embodiment, as best seen (in) Fig 4, network layer 4 also includes first service provider server 60, e.g.

HP Apache Web Server, having programming 61 . . . . ." Examiner notes that Figure 4 lacks both reference character "4" and "61".

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claims 1-4, 6-7 and 9 are objected to because of the following informalities: Claim 1 recites the limitation, "the network layer" on line 35. Upon review of the Specification and the claim in its entirety, Examiner notes that one of ordinary skill could reasonably ascertain that this limitation refers to the "interactive communications network layer" recited on line 30 of Claim 1. While one of ordinary skill could reasonably make this connection, Examiner believes that in light of the length of claim one it would improve the clarity of the claim if Applicant amended the limitation "the network layer" to "the interactive communications network layer". Additionally, Examiner notes that confusion results from Claim 17's recitation of "the interactive

communications network layer". Once again, for clarity and consistency Examiner respectfully recommends Applicant amend the claims as suggested (also see claims 4, 6, 7 and 12).

Further, Claim 1 also includes "the server programming" on line 36. Once again, upon review of the Specification and the claim in its entirety, one of ordinary skill in the art could reasonable ascertain that this limitation refers to the first service provider server programming. While one of ordinary skill could reasonably make this connection, Examiner believes that in light of other servers recited in claim one (e.g. subscriber server) it would improve the clarity of the claim if Applicant amended the limitation "the server programming" to "the first service provider server programming". (also see claims 9 and 13)

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-4, 6-7, 9 and 13-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 13 recite the limitation "the data processed by the service provider module" in lines 38-39 and 4, respectively. There is insufficient antecedent basis for this limitation in the claims. In particular, Examiner finds no support of the service provider

module processing data and as such, it is unclear what data is being returned to the subscriber server.

Further, claims 6, 7 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the three claims depend on cancelled claim 5. As Applicant states that the limitations of claims 5 have been incorporated into claim 1 (Arguments with Amendment filed 11/15/04, page 13, lines 16-17), Examiner will interpret claims 6, 7 and 9 as depending on claim 1.

Further, claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 9 requires the server programming to host tax computation programming, while newly amended claim 1 requires the server programming to transmit the request to a tax computation module. Examiner finds the claim indefinite because it is unclear how the server programming can transmits a request to itself. Upon review of the claims in their entirety and in view of the Specification, Examiner will interpret the claim 9, such that the tax computation programming and programming for tax data report remittance over the interactive communications network are hosted in the Financial Link module (see claims 11 and 15).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4, 7, 9, and 11 –18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ginter et al. in view of Ryan Jr. et al.

Ginter et al. teaches an integrated, modular array of administrative and support services for electronic commerce and transaction management (column 4; lines 63-66 and Figure 1B). Further the architecture of Ginter et al. provides a collection of service functions that may execute as applications (modules). These service functions define a variety of useful tasks and can be combined in various combinations and sub-combinations depending upon business models, for example to provide overall functionality desired for any particular implementation (see column 35, lines 3-13). Ginter et al. further teaches a non-exhaustive list of examples of such service functions (modules) starting on column 35, line 44 through column 36, line 49.

Examiner notes that within this modular array of services functions, Ginter et al. supports a service module for performing and operatively housing a plurality of discrete system security operations including

- a first security module for protecting the system from entry of unwanted data during data transfer over the network (e.g. column 17; lines 1-30),

- a second security module for controlling user access to at least one of the system services (e.g. column 29; line 60 – column 30; line 52 and column 36, line 3, "identity authentication" service function).

Examiner notes that protected processing environment of Ginter et al, provides a highly secure, trusted environment in which electronic processes and transactions can be reliably performed without significant danger of tampering or other compromise and represents Applicant's first security module.

Further, the Certifying Authority of Ginter et al. issues digital certificates that certify particular facts. In other words, Certifying Authority controls access to a system based on a user ID and represents Applicants second security module. Examiner notes that this is further supported by the "identity authentication" service function (module) taught by Ginter et al. in the list of service functions (modules).

The modular array of service functions taught by Ginter et al. further supports a system management and monitoring module including:

- a subscriber availability module for monitoring the availability of subscriber services in real-time to insure relatively continuous availability of services over the network (column 35, line 50, "monitoring status" service function)

- a notification module for transmitting a message to a system administrator when a selected condition has been met (column 35, line 63, "status notification" service function)

- an operating system module for monitoring the usage of the operating system (column 36, line 12, "usage database management" service function)

- a system availability module for monitoring the availability of internal support processes in real-time to insure relatively continuous availability

of the services over the network (column 35, line 53, "process control" service function)

Examiner once again points to the non-exhaustive list of service functions found in Ginter et al. on column 35, line 44 – column 36, line 49. Examiner additionally, points out again that Ginter et al. teaches these service functions can be combined in various combinations and sub-combinations depending upon business models, for example to provide overall functionality desired for any particular implementation.

The modular array of service functions taught by Ginter et al. further supports a system operations module including:

- a system back up and recovery module for periodically performing backup of system data so as to maintain a plurality of duplicate data sets on each system server for auditing and database recovery (column 35, line 46, "audit" service function, column 36, line 9, "replication" service function, column 36, line 23, "archiving" service function)

- a secure access module for allowing the system administrator to access the system remotely, the system having programming for encrypting all data transfers so as to eliminated eavesdropping, connection hijacking and network-level virus attacks (column 36, line 47, "director database management" service function) (also see column 33; lines 5-25 for use of encryption within the Virtual Distribution Environment (VDE) of Ginter et al.).

- a system utility module for tracking login/logout, object creation, deletion, editing and rule base changes (column 36, line 27, "rights and permission database management" service function).

The modular array of service functions taught by Ginter et al. further supports a load balancing and scalability module for managing system resources, for balancing the data load between servers, for detecting a selected change in data load and activating

standby systems for handling increased system data volume and for switching the data load from one server to the other upon server failure (see column 37, lines 34-44).

Once again Examiner notes that Ginter et al. teaches an integrated, modular array of administrative and support services for electronic commerce and transaction management (column 4; lines 63-66 and Figure 1B). Further Examiner notes that Ginter et al. teaches that the electronic commerce and transaction management are supported over a multilayer architecture.

In support of the assertion that Ginter et al. teaches a multilayer architecture, Examiner refers to Ginter et al.'s architectural diagram for a financial clearing house (see Figure 19 and the associated descriptions on column 47, line 62 through column 13).

Examiner asserts that the secure nodes in Figure 19, defined by Ginter et al. as electronic appliances (column 48, lines 5-7) represent Applicant's subscriber layer having at least one subscriber server for hosting a virtual portal with at least one application for providing the services to the subscriber. Examiner notes that Applicant provides additional support for this assertion in the Specification (page 19, lines 13-17 and page 5, lines 20-21) stating that the subscriber layer includes a subscriber server for providing e-content to a clients using a conventional network browser (e.g. Microsoft Internet Explorer). Examiner notes that the electronic appliance of Ginter et al. meets this definition (see column 3, lines 7-11).

Examiner further asserts that the secure communications 246 of Ginter et al. represents Applicant's interactive communications network layer having at least one device for protecting the system from entry of unwanted data during data transfer from

the subscriber layer though the network layer (column 48, lines 5-7). Examiner notes that electronic containers represent the protection device of Applicant's invention.

Examiner further asserts that Ginter et al. teaches that the secure communications 246 (interactive communications network) includes a first service provider server with programming for parsing a Web protocol coded message entering the system (column 48, lines 24-44). Examiner notes that the encoding of email message represents parsing a Web protocol coded message entering the system.

Examiner also notes that Ginter et al. teaches that the secure communications 246 receives a tax computation transaction request from the subscriber server (client) and transmits the request to a tax computation module (column 49, lines 48-53). Examiner notes that the received audit information represents the tax computation transaction request from subscriber server, since Ginter et al. teaches that the financial clearinghouse calculates an amount due, including amounts due to tax authorities. Examiner notes that Ginter et al teaches taxes calculated include sales tax (see column 22, lines 20-23 and page 45, lines 30-33). Examiner notes that for the system of Ginter et al. to include an amount due from the audit information, the data must be transmitted to a computation module.

Ginter et al. further teaches an applications layer for interpreting transaction requests or messages entering the system and invoking Web-based services (see transaction processor 248 Figure 19 and column 48, lines 44-47).

Ginter et al. further teaches a database layer (Figure 19, Database 250 and column 48, lines 44-47). Examiner further notes that Applicant discloses that the database layer stores requests initiated by the subscriber and a response of data processed by the

applications layer (page 6, lines 14-16). Examiner notes that the database of Ginter et al. meets this criterion.

Ginter et al. teaches a financial link layer (Figure 19, Switch 252 and Interface 245, and column 48, lines 62-67). Examiner further notes that Applicant discloses the financial link layer, has programming for effecting electronic transfer of funds (page 6, lines 16-17). Examiner asserts that the Interface blocks 254 of Ginter et al. meet this criterion.

Ginter et al. does not specifically teach that the Financial link layer includes a tax computation module for receiving a tax transaction request, calculating sales and/or use tax due for payments and accruals.

Ryan Jr. et al. teaches a secure tax meter which calculates and logs tax and transmits amount of tax that are due (page 2, paragraph 19, lines 13-14). Examiner notes that the tax meter increases assurances of correct tax calculation (page 1, paragraph 0010, lines 1-3).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Ginter et al. to include a specific tax meter for calculating tax due as taught by Ryan Jr. et al. One of ordinary skill would have been motivated to combine these references in order to increase the assurances of correct tax calculation.

Ginter et al. teaches wherein the first security module is a managed firewall device (column 17, lines 1-29). Examiner notes that a hardware or software based "secure processing unit" represents a managed firewall device.

Ginter et al. does not specifically mention including the load balancing and scalability module in the Secure Communications handler (interactive communications network layer. However, Ginter et al. teaches that the loading balance and scalability module is used to provide increased efficiency across the servers as transactions are received (column 37, lines 30-44). In other words, as soon as transactions are received they are first run through the load balancing and scalability module in order to determine the most efficient use of the servers.

Further, relying on Figure 19 and the description of the Secure Communications handler 256 (interactive communications network layer) (column 48, lines 5-7) Examiner points out that Ginter et al. teaches the Secure Communications handler 256 (interactive communications network layer) receives all communications. In other words, the Secure Communications handler 256 (interactive communications network layer) is the first stop for all incoming communications.

As such, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the load balancing and scalability module in the Secure Communications handler 256 (interactive communications network layer) in order to deterine the most efficient use of the servers.

Ginter et al. teaches interpreting TXP-based transaction requests or messages entering the system. Examiner once again points out that Ginter et al. teaches the financial clearinghouse able to report and pay taxes (see column 22, lines 20-23 and column 45, lines 30-33). Examiner asserts that in order for the clearinghouse to disperse tax payments the clearinghouse inherently interprets TXP-based messages.

For support for this position, Examiner relies on Tax Information Release No.95-6, Question 8. The reference teaches that before a financial institution can perform its part of a (tax) transaction it must use CCD+TXP format. Examiner notes if the financial institution does not use that format, the (tax) transaction is not possible. As such Examiner assert that since Ginter et al. teaches the ability to perform tax transactions, then the ability to interpret TXP format is necessarily present.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ginter et al. in view of Ryan Jr. et al. as applied to claims 1-4, 7, 9, and 11 –18 above, and further in view of Microsoft Computer Dictionary.

Ginter et al. does not specifically teach interpreting XML-based transaction requests or messages entering the system. Examiner once again points out that Ginter et al. does teach parsing Web protocol coded message entering the system (i.e. e-mail) (column 48, lines 24-44). Further, Ginter et al. teaches clearinghouses communicating via the Internet (column 124, lines 3-6).

Microsoft Computer Dictionary teaches that XML is a modern version of HTML which is the markup language for documents on the World Wide Web. XML offers developers and designers greater flexibility in organizing and presenting information.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of Ginter et al. in view of Ryan Jr. et al. to specifically included interpreting XML-based transaction requests or messages entering the system. One of ordinary skill in the art would have been motivated to modify the teachings in order to ensure the that system allowed for additionally flexibility provided by XML.

Response to Arguments

Applicant's arguments with respect to claims 1-4, 6-7, 9, and 11-18 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Kramer whose telephone number is (571) 272 6783. The examiner can normally be reached on Monday - Friday (8AM - 5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on (571) 272 6777. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

4/26/05

James A. Kramer
Examiner
Art Unit 3627

jak